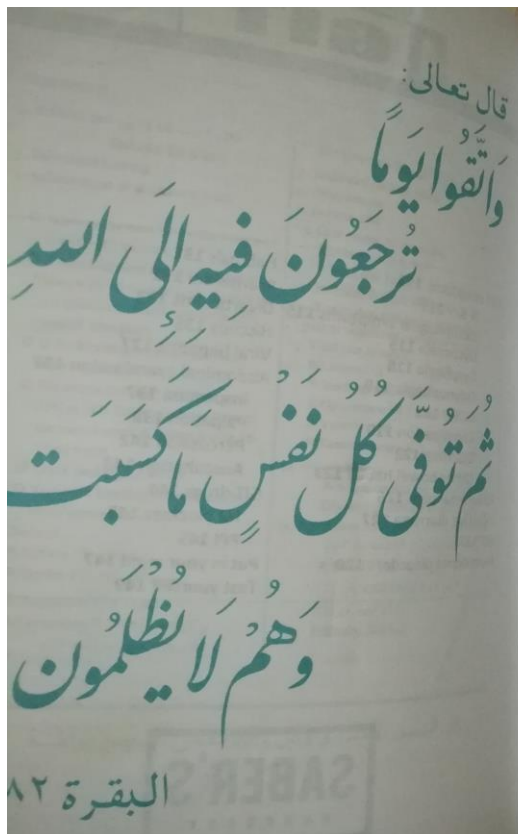


4 GIT

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VISIT...

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GIT symptoms

A. Nausea & Vomiting

See abdominal examination at the end of this chapter

Nausea = feeling of sickness - inclination of vomiting

- Occurs in waves
- May last from seconds to days
- Vomiting (emesis): forceful expulsion of the gastric contents by reflex contractions of the thoracic and gastric ms.
- Vomiting is usually associated with pallor, sweating & hyperventilation

Vomiting shortly after feed

- Acute cholecystitis
- Acute pancreatitis
- Gastroparesis
- Gastric outlet obstruction

1. Timing

- Vomiting delayed for $\geq 1hr$ after meal: suggest gastro-oesophageal obstruction or gastroparesis

2. Nature of vomitus

Blood (haematemesis)

Ask

- The amount of blood: bleeding? [See the causes below]
- Previous bleeding episodes? previous surgery?
- Cigarette smoking?
- Drugs such as NSAIDs? aspirin? warfarin?
- Weight loss? dysphagia? abdominal pain & melena? : Think of cancer.

Bile

- Come in 2 colors : green & yellow or orange
- Yellow bile** occurs in small lumps
- Undigested food without bile suggests lack of connection () the stomach and the small intestine (e.g. pyloric obstruction)

Nature of haematemesis

- Large volume of **fresh**, red blood: suggests active bleeding (varices, PU, GORD)
- Small streak (minor oesophageal trauma)
- Coffee grounds (digested blood: brown and in small lumps)

Vomiting + abdominal pain + fever

- Gastroenteritis *Suggested by ↑ed diarrhea & ↑bowel sounds*
- Food poisoning
- UTI ± pyelonephritis *Sugg. by dysuria, ↑ frequency*
- Acute appendicitis *Sugg. by RLQ, anorexia, fever. Confirmed by: tenderness at McBurney's point & guarding*
- Hepatitis A or B *Sugg. by RUQ pain, jaundice. Confirmed by: ↑ ALT, ↑ bilirubin, serology*
- Pneumonia *Sugg. by cough, dyspnea, fever, ↑wcc*
- Pelvic inflammatory disease *Sugg. by lower abdominal, fever, vaginal discharge. Confirmed by: pelvic u/s, laparoscopy.*
- Haemolytic uremic syndrome *Sugg. by haematuria, fever, confusion*

Vomiting + abdominal pain alone (no relation to food, no fever, no metabolic causes)

- Large bowel obstruction *Suggested by distension, fecal vomiting*
- Hepatic carcinoma
- Renal calculi
- Ectopic pregnancy, miscarriage

5. Acute inferior MI

6. CCF

Sugg. by dyspnea, Orthopnea, paroxysmal nocturnal dyspnea, lower extremity edema, tenderness, leg swelling. Confirmed by CXR, echo

7. Mesenteric occlusion

References: 1. Oxford handbook of clinical diagnosis 1st ed p 360-371

B. Oesophageal symptoms

1. DYSPEPSIA S&R

Means: multiple symptoms "epigastric pain, heartburn, Early satiety, bloating, nausea, vomiting"

Causes of dyspepsia:

- GORD and gastritis 15 %
- Peptic ulcer 15 %
- Upper GIT cancer
- Non ulcer dyspepsia 60 %

Management of uninvestigated dyspepsia:

- Do **Endoscopy** if you found alarming symptoms or the patient was over 55 ys old.

Alarming symptoms

- Chronic GIT bleeding
- Progressive weight loss
- Progressive dyspepsia
- Persistent vomiting
- Iron deficiency anemia
- Epigastric mass

- If there is **no alarming symptoms** Give Antacids + Anti reflux measures

- R/EPICOGEL SUSP.** ملعقة كبيرة ٣ مرات يوميا قبل الأكل
- Or **R/MUCOGEL IX3**
- Or **R/ MOTILUM OR R/PRIMPERAN TAB IX3**

دفع المريض

- توقف عن الأكل قبل النوم 3 ساعات
- تم على محبة عالية
- تجنب المشروبات الساخنة
- قلل القهوة وامتنع عن التدخين والكحوليات
- تجنب الأكل الدسم والمواخ والتجبن
- خفف وزنك واعمل ريجيم

3. If no improvement, see if there is past ulcer or not

4. If there is **past ulcer**, eradicate *Helicobacter pylori*

Eradication of H. Pylori (7 days regimen) كورس الأيام السبعة

1. Full dose PPIs (lansoprazole 30 mg 1x2 + amoxicillin 1gm 1x2 + clarithromycin 500 mg 1x2 ... for 7 days)

R/PEPTAZOLE - كبسولة كل ١٢ ساعة لمدة أسبوع

R/E-MOX 900MG - قرصين كل ١٢ ساعة لمدة أسبوع

R/KLACID 900 - 84 LE - قرص كل ١٢ ساعة لمدة أسبوع

OR R/KLARIMIX 900 - 51 L.E

OR 2. Full dose PPIs (lansoprazole 30 mg + metronidazole 400 mg 1x2 + clarithromycin 250 mg 1x2 ... for 7 days)

R/PEPTAZOLE - كبسولة كل ١٢ ساعة لمدة أسبوع

R/FLAGYL 500 - قرصين كل ١٢ ساعة لمدة أسبوع

R/KLACID 900 - 84 LE - قرص كل ١٢ ساعة لمدة أسبوع

5. If there is no past ulcer **test for H. pylori** (in stool)

6. If it is present, **Eradicate**

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7. If not, give PPI for 2 weeks or ranitidine 150mg for 2 weeks (RANTIDOL 150 - قرص مرتين يوميا - ١٠٠٠)

8. After eradication, If **no improvement** add ranitidine 150 mg 1x2 for 1 month (قرص واحد مرتين يوميا لمدة شهر) OR Domperidone 10 mg 1x3 for 1 month (R/MOTILUM - قرص واحد ٣ مرات يوميا لمدة شهر - ١٠٠٠)

Dyspepsia

Yes ← Alarming signs → NO

Yes → Endoscopy

NO → Antacids - anti-reflux measures

No improvement → See past ulcer

Yes → Eradicate H. pylori

NO → Test for H. pylori

Present → Eradicate

No improvement → Add Ranitidine 150 1x2 for 1 month Or domperidone (R/Motilium 1x3x30)

Improved → Continue low dose treatment

Not present → Give PPI for 2 weeks or Ranitidine 150 for 2 weeks

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2. **Dysphagia: (Difficulty of swallowing)**

You should know:

- Level of obstruction**
- Onset:**
 - Cancer:** over few months
 - Benign peptic stricture** may describe a very long history of GORD & progressive dysphagia.
- Causes:**
 - Intermittent?** for only the first few swallows (lower oesophageal stricture spasm)
 - Progressive:** cancer, stricture & achalasia
- Solids / Liquids**
 - Solids = Liquids:** think of motor cause (achalasia, spasm)
 - Solids > Liquids:** physical obstruction such as cancer
- Associated symptoms:**
 - Heart burn (leads to oesophageal strictures)
 - Weight loss, wasting, fatigue (perhaps suggestive of cancer)
 - Coughing & choking suggests pharyngeal dysphagia due to motor dysphagia.
- Some causes of dysphagia:**
 - Oral:** painful mouth ulceration, oral or throat infection
 - Cerebrovascular stroke** or mythenia gravis
 - Dysmotility:** such as achalasia
 - Mechanical as:**
 - Cancer
 - Pharyngeal pouch
 - Peptic stricture
 - External compression on the esophagus (e.g. lung or thyroid tumors)

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3. **Odynophagia:**

- Pain during swallowing (substernal sensation)
- Usually a rather unpleasant sensation
- Suggestive of oesophageal inflammation (infective oesophagitis): candida, herpes CMV, PU, Oesophageal perforation

4. **GORD (Heart burn, acid reflux)**

Typical features:

- Site:** midline, retrosternal
- Radiation:** to the throat & occasionally the infra-scapular regions
- Nature:** Burning
- Aggravating factors:**
 - Worse after meals
 - When performing postures which ↑ the intra-abdominal pressure such as (bending, stooping, lying supine)
 - Worse during pregnancy
- Associated symptoms:**
 - Often accompanied by acid or bitter taste (acid regurgitation)
 - A sudden filling of the mouth with saliva (water brush)
 - Acid reflux may be worsened by certain foods (alcohol, caffeine, chocolate, fatty meals)
 - May be worsened by some drugs (CCB, anticholinergics)
 - Hiatus hernia may be a cause.

C. Constipation ٥٤٤

- Means different things to different people
- Normal bowel habit ranges from 3 times / day to once every 3 days
- Constipation = passage of stool < 3 times/week
- or Constipation = stools that are hard or difficult to pass

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Ask about:

- Duration of constipation
- Stool size & consistency
- Straining particularly at the end of evacuation
- Associated symptoms (Nausea, vomiting, weight loss)
- Pain on defecation
- Rectal bleeding?
- Intercurrent diarrhea
- Fluid & Fiber intake
- Calcium antacids
- Hypothyroidism or hypercalcemia.

Management

(1) Chronic constipation

Advice

1. Encourage exercise
2. Encourage high fluid intake
3. Allow sufficient time for defecation e.g. after meals (especially after breakfast when colonic activity is at its highest)
4. Encourage a high fiber diet.

Some causes of constipation

1. Low fiber diet
2. Physical immobility (lack of exercise)
3. Drugs as **aluminum, antacids**, opioids, purgative dependence
4. Hypothyroidism (*sugg. by cold intolerance, lethargy, blood limited to surface of stool*), hypercalcemia
5. Habitual neglect *يتم تجاهل الحاجة*
6. Anorectal disease (anal fissure: causes pain so the patient fears of defecation altogether), haemorrhoids.
7. Depression
8. Automatic neuropathy, spinal cord injury
9. Rectal tumours: *sugg. by rectal bleeding*.

الألمعة التي تحتوي على ألياف:
 - الحبوب - البسكويت
 - الخضروات مثل القرع - الخس - الطماطم - السبانخ - البطاطس - الفاصوليا
 - أقراص الردة R/Bran

Prescribing:

1. Laxatives

R/Sennalax **2-8 tabs at night** (senna) or 1x3
 Or R/Agiolax sachets 1x3

R/Picolax drops
 الأطفال من ١٤-٧ نقطة/اليوم
 البالغين من ٢٠-١٥ نقطة/اليوم

Increase intestinal motility; don't use in obstruction

2. Bulking agents:

- High faecal mass so **take them with plenty of fluids**
- May take a few days to act
- R/Bran أقراص الردة

3. Osmotic agents e.g. lactulose 30-50mL /12hr or 1x3
 R/Duphac syp. 1x3

4. Stool softeners

Useful when managing painful anal condition as anal fissure.
 R/Glycerin supp. ليوسنة عند اللزوم
 Or R/Epico salt sachets (Mg salts)
 كيس على نصف كوب ماء قبل الفطار على معدة فارغة

- Refer if you suspected serious condition e.g. constipation developing suddenly in middle aged person for no clear cause.

(2) Acute constipation

- Advice as above
- Try to know the problem e.g. post operative, peri-anal pain, **opiates**
- Use sennalax in sufficient dose **6-8 tab at night**
- Patients may require disimpaction by
 - Glycerin supp.
 - Or enema (R/Enemax)
 - Or manual evacuation

N.B.: Constipation alone is unlikely to be a symptom of serious organic disease and therefore can be met with reassurance.

References:

1. OHCM: p240, 241
2. GP: p124, 125

D. Diarrhea: DGT

Def: Increase in stool volume (>200ml) and frequency (3/day)
 Or Change in consistency to semi-formed or liquid stool

Colour, consistency, offensive smell

- Duration
- Course: acute diarrhea is suggestive of infection
- Is there any blood, mucous or pus?
- Is there urgency?
- Associated pain or colic?

Any difference if the patient fast?

- No change: in secretory diarrhea e.g. E-coli, staph aureus
- Disappears on fasting: osmotic diarrhea
- Foreign travel (traveler's diarrhea)
- Recent Antibiotics (Ab associated diarrhea)
- Does the diarrhea disturb the patient's sleep

Some causes of diarrhea:

1) Malabsorption

- May cause Steatorrhea: a fatty, pale stool, which is extremely odorous & difficult to flush.

2) ↑ Intestinal Motility

- Hyperthyroidism, IBS.

3) Osmotic

- Large volume of stool which disappears with fasting.
- Causes: lactose intolerance, gastric surgery.

4) Secretory

- High volume of stool which persists with fasting.

Common causes of diarrhea

1. Gastroenteritis (bacterial, viral, parasite)
2. IBS
3. Cancer colon
4. UC
5. Crohn's disease
6. Coeliac disease

No pus, blood or excessive fat

Some causes:

- Gastrointestinal infection
- Zollinger-Ellison syndrome
- Villous adenoma of the colon

5) Exudative: inflammation of the bowel

- Causes small volume, frequent stool
- Often with blood or mucous
- Causes: colonic cancer, Crohn's dse, ulcerative colitis.

Hints:

- Chronic: > 2 weeks
- Acute or Chronic
 - Acute: Suggest GE
 - Chronic alternating constipation, suggest IBS
- Anorexia, weight loss: suggest organic cause
- Bloody diarrhea: salmonella, shigella, E-coli, amoeba, cancer, Crohn's, polyps, pseudo-membranous colitis.
- Large bowel symptoms:
 - watery stool ± blood or mucus, pelvic pain relieved by defecation
- Small Bowel symptoms:
 - Peri-umbilical or (RIF) pain not relieved by defecation, watery stool or steatorrhea.
- Non GI causes: PPI, Abs, NSAIDS, thyrotoxicosis

E. Other Bowel habits

A. Rectal bleeding and melena

Ask about

1. The amount: small amounts can appear dramatic colouring toilet water red
2. Nature of the blood (brown, red, black)
3. Mixed with the stool or "On" the stool

GIT (Page 12)

4. Any associated features: mucous may indicate IBD or colonic cancer

B. Melena

- Jet black, tar like & pungent smelling stools
- Blood from upper GIT or right side of the large intestine
- Digested blood

C. Mucus

- Clear, viscid secretion of the mms
- Contains mucus epithelial cells, leukocytes & salts suspended in water
- Presence of mucus may indicate:
 - IBD
 - Small or Large bowel fistula
 - IBS
 - Colonic villous adenoma
 - Solitary rectal ulcer

D. Flatus

- Excessive flatus is a particular feature of:
 - PU
 - Aerophagia (Air-swallowing)
 - High fiber diet

E. Steatorrhea (fat malabsorption)

- A common feature of **pancreatic insufficiency** (d.t chronic pancreatitis, cystic fibrosis)
- Also caused by:
 - IBS
 - Celiac dse
 - Blind bowel loops

GIT (Page 13)

Some causes of lower GI bleeding

1. Haemorrhoids (piles)
2. Anal fissure
3. IBD (Crohn's disease, ulcerative colitis)
4. Solitary rectal ulcer
5. Cancer colon
6. Diverticular dse

Some causes of upper GI bleeding

1. PU
2. Erosive or ulcerative oesophagitis
3. Gastritis
4. Varices
5. Cancer
6. Bleeding disorders
7. Vasculitis

F. Tenesmus

Def.: Intense desire to defecate but no stool

Causes:

1. Rectal inflammation (proctitis)

Suggested by: rectal bleeding, mucus discharge

Confirmed by: proctoscopy, sigmoidoscopy

Initial management: Steroids supp., ceftriaxone, iv fluids vomiting
2. Rectal tumours
3. Tumours of the descending colon

Sugg. by alternating diarrhea & constipation
4. Pelvic inflammatory

Sugg. by lower abdominal pain, fever, vaginal discharge, dysuria → u/s, high vaginal swab ± laparoscopy.

References

1. Oxford handbook of clinical diagnosis 1st ed. p 424

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Abdominal pain (see ER for more details)

1) Site:

- Usually abdominal pain is referred pain
- Patients often point to a wide area
- In this case ask the patient "Use one finger and point to where the pain is worst"

Sites of abdominal pain & embryologic origins

1. Epigastric: foregut (stomach, duodenum, liver, pancreas, gall bladder)
2. Periumbilical: midgut (small & large intestines including appendix)
3. Suprapubic: hindgut (rectum & urological organs)
 - Very localized pain may originate from **parietal peritoneum**

2) Radiation

Some Examples

- Right scapula: gall bladder
- Shoulder-tip: diaphragmatic irritation
- Mid back: pancreas

3) Character

- Do not ask leading questions
- Examples:
 - Colicky: pain which comes and goes in waves and indicates obstruction of a hollow muscular organ (intestine, gall bladder, bile duct, ureter)
 - Burning: usually indicates an acid cause and is related to the stomach, duodenum or lower end of the esophagus.

4) Also ask about aggravating and relieving factors

5) Findings:

1. Renal colic

Colicky pain at the renal angles ± joints which are tender to touch, radiating to the groins / testicles / labiae. Typically the patient is unable to find a position that relieves the pain.

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GIT (Page 13)

2. Bladder pain

A diffuse severe pain in the suprapubic region
3. Prostatic pain

A dull ache which may be felt in the lower abdomen, rectum, perineum or anterior thigh.
4. Urethral pain

Variable in presentation ranging from a "tickling" discomfort to a severe sharp pain felt at the end of the urethra (tip of the penis in males) and exacerbated by micturition. Can be so severe that the patient attempts to "hold on" to urine causing yet more problems

يعجز المريض عن التبول لو دخل الحزام هيثم أكثر
5. Small intestine obstruction

Colicky central pain associated with vomiting, abdominal distension ± constipation
6. Colonic pain

As above: but sometimes temporarily relieved by defecation or passing flatus.

References

Oxford handbook of clinical examination and practical skills p228, 229

1. Infective diarrhea and Gastro-enteritis (GE) D47

Acute diarrhea → think of:

1. Food poisoning
2. Viral GE
3. IBS
4. Ischemic colitis

Most common causes

Diagnosis

- History: ask about
 1. Ingestion of suspicious food
 2. Occupation (food handlers will require specific advice)
 3. Recent travel abroad
 4. Blood in the stool
- Investigations: Do stool examination if
 - Severe diarrhea

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- Diarrhea more than 7 days
- Blood in the stool
- Recent history of foreign travel
- Patient works with food

4 Management:

- * اشرب سوائل كثير
- * تجنب مضادات الإسهال قدر الإمكان
- * If necessary, give Loperamide
- * R/Imodium (expensive) كبسولتين الآن ثم كبسولة لكل مرة إسهال

Prescribing

1. Prophylaxis against traveler's diarrhea
R/Ciprofar 500mg 1x2x5
 2. Salmonella & shigella
R/Ciprofar 500 1x2x5
 3. Giardiasis
• Metronidazole 2g/d for 3 days
R/Flagyl 500 1x4x3
- For GE (if uncertain of the cause give:
R/Cipromax 500 or Ciprofar 1x2x5
R/Flagyl 500 1x3x7
R/Motilium 1x3
R/Colona 1x3
R/Imodium cap (for severe diarrhea)
cap after each pass
Good hydration
- Suspect giardiasis if
 - o 2 weeks I.P
 - o Watery stools

Refer if:

- There is dehydration
- Toxaemia, abdominal pain or abdominal distension
- The diagnosis is unclear

References:
1. OHCM: p238, 239
2. GP: p120, 121

2. Irritable Bowel Syndrome (IBS) = spastic colon التبولن العصى DQT

- Functional disorder affecting any part of the GIT
- Characterised by **abdominal pain** and **altered bowel habit** (diarrhea & constipation occurring alone or in combination)
- Patient is likely to be **young and female**
- Non-bowel symptoms
 - o General malaise, headache, backache
 - o Symptoms may exacerbate with stress

Diagnosis:

Rome III criteria: diagnosis of irritable bowel syndrome

Recurrent abdominal pain, **for at least the last 6 months**, on **at least 3 days per month** in the last 3 months, associated with two or more of the following:

- Improvement with defecation
- Onset associated with a change in stool frequency
- Onset associated with a change in form of stool

Management:

1. Diet

- Avoid foods which exacerbate the symptoms
تجنب الأطعمة التي تسبب الانتفاخ مثل: الفول - الطعمية - البقوليات - المسبكات
- Encourage high fiber diet and high fluids
تأمرل وجبات خفيفة

2. Prescribing:

1. For constipation

Use Laxatives: R/Sennalax 2-8 tabs at night or R/Agiolax sachets 1x3

2. For nausea and bloating

R/Primperan 10 1x3 or R/Motilium 1x3

3. For Colic use Mebeverine 135 mg 1 x 3

R/Duspatalin or R/Colona 1x3 ساعة قبل الأكل

4. For Diarrhea

R/Imodium cap كبسولة بعد كل إسهال

5. For flatulence

R/Disflatyl tab قرصين مضغ للانتفاخات

N.B Don't use Lactulose for constipation of IBS: it causes high gas production.

Markers suggesting a disease other than IBS

- Age > 40 yrs
- History < 6 months
- Anorexia, weight loss
- Waking at night with pain/diarrhea
- Mouth ulcers

References:
1. OHCM: p268, 269
2. GP: p122, 123

3. Nutritional disorders

1] Scurvy:

- Due to **lack of vitamin C** in the diet
- Is the patient poor, pregnant?

Signs:

1. Listlessness, anorexia, cachexia
2. Gingivitis, Loose teeth, halitosis
3. Bleeding from the gums, nose, hair follicles or into joints, bladder, gut.

Treatment:

Ascorbic acid (Vit C) $\geq 250\text{mg/day}$ po

2] Beri-beri:

Due to vit B₁ (thiamin) deficiency.

- Wet beriberi: heart failure with general oedema
- Dry beriberi: neuropathy

3] Pellagra: Nicotinic acid deficiency

- Classical triad: **Diarrhea, Dementia, Dermatitis**
- **Neuropathy**, depression, insomnia, tremor, rigidity, fits
- Endemic in China & Africa
- **Treatment:** Nicotinamide 100mg/4hr PO

4] Xerophthalmia:

Vit A deficiency syndrome. Major cause of:

- Blindness in the tropics
- Conjunctivae become dry and develop oval & triangular spots
- Cornea becomes cloudy and soft
- **Treatment:** Vit A 200,000 IU stat (immediately) PO in 24h and a week later
- Halve dose if < 1yr old, quarter if < 6 months old.

References: OHCM: p 270

4. Halitosis (Foetor oris) س4R

- Common after sleep
- **Short term halitosis**
 - o Associated with acute illness e.g. tonsillitis, sinusitis, appendicitis, GE, DKA

Chronic halitosis

- Usually caused by bacterial putrefaction of food debris and dental plaque and related poor oral hygiene.
- Associated with gingivitis, smoking, alcohol, nitrated & disulfiram
- Associated with mouth breathing in children.

Management:

- Refer to a dentist for oral assessment
- Advise on oral hygiene e.g. regular brushing of teeth and tongue
- Advise on smoke cessation
- Diet: avoid garlic, onion, curries
- Mouth wash: 2% aqueous chlorhexidine gluconate
R/Oraldene mw 1x3
- AB: R/Flagyl 500 1x3 for 2 weeks

5. Pruritis ani SgR

Causes:

- The usual cause in children is **threadworms** especially if the hx is short
- Thread worms (ask about the presence of worms in the stools)
- Anorectal disease e.g. piles, fissures
- Skin disease e.g. psoriasis, contact dermatitis (including allergic reactions to products used to treat the pruritis)
- Infections e.g. fungal
- Systematic disease e.g. DM (fungal infection) & chronic liver disease

Management:

A) Thread worms

- Pruritis is due to peri-anal egg deposition
- Treat the affected child only and advise other family members on hygiene or treat all family members.
- Wash peri-anal skin each morning
- Wash hands & nails after each visit to the lavatory
- Treatment
 - Mebendazole 100mg stat & repeat 2 weeks later
 - R/Antiver 100mg tab. or suspension
 - فرض أو معلقة الآن تكرر بعد أسبوعين وفي كل جرعة شربة
 - دست خروج لإخراج الديدان الميتة.

B) General: if no treatable cause found

- Consider treating empirically for thread worms
- Advise careful peri-anal hygiene after defecation with thorough drying.
- Avoid use of allergenic substances
- Hydrocortisone ointment R/Betnovate oint 1x1 at night or Topical antifungal/steroid mix uses
- R/Triderm cream 1x2

References: GP: p126

6. Diverticulitis SgR

Acute diverticulitis

- Lower abd. pain (usually left iliac)
- altered bowel habit
- Fever
- There may be
 - Nausea & vomiting
 - Dysuria & urgency (irritation of the bladder)

- Rectal bleeding

Chronic diverticulitis

- Abdominal pain (usually left iliac)
- Altered bowel habit
- Symptoms are often improved by defecation

Management:

A) Acute diverticulitis

- R/Augmentin 375 1x3x7
Or R/Flagyl 500 1x3x7 + R/Bactiocl 1x2x7
- Admit if there is
 - High fever
 - Significant peritoneal signs
 - Inability to tolerate fluids

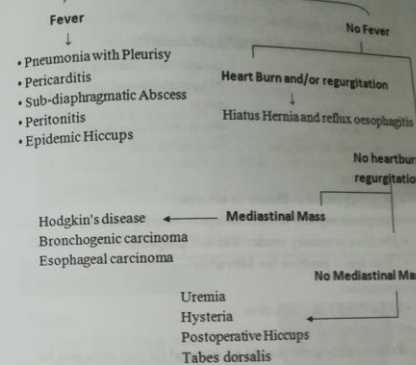
- Exclude if appropriate other causes of rectal bleeding, abdominal pain or altered bowel habit, particularly cancer colon.

B) Diverticular disease:

- Investigate for change in bowel habit
- Once diagnosis is confirmed, treat with high fiber diet + R/Colona 1x3

References: GP: p122

7. Hiccups



Hiccups: Are involuntary diaphragmatic contractions with closure of the glottis. This is a result of a diaphragmatic irritation or a metabolic cause.

8. Viral hepatitis DgT

- Hepatitis A is the most common form of hepatitis seen in general practice.
- I.P. is about 1 month
- Spread by the feco-oral rout
- Hepatitis B is acquired parentally e.g. by blood transfusion, needle stick, injury or sexually
- HCV spread by blood transfusion (commonly by IV drug abuse)
- HCV does not easily spread by sexual contact

■ Diagnosis:

• Hx:

- Symptoms usually asymptomatic

• Early symptoms of hepatitis can include:

- Malaise
- Nausea
- Mild fever
- Headache
- Distaste of cigarettes
- Anorexia & diarrhea
- Upper abdominal pain
- Pale
- Skin rashes & arthralgia (can occur with HBV)

• Examination:

- **Jaundice** (most evidence in sclerae)
- Lymphadenopathy & splenomegaly may be present
- The liver is usually **tender but not palpable**
- Urine test is **positive for bilirubin**

• Investigation:

- LFTs: ↑ AST & ↑ bilirubin
- CBC: lymphocytosis
- **Prothrombin time should be normal** (if ↑ indicates hepatic failure)
- Hepatitis B surface Ag is diagnostic of acute hepatitis B.

■ Management:

- No specific ttt is needed for HAV or HBV
- Bed rest with simple **analgesia** for muscle or abdominal pain.
- The acute illness usually **resolves in 3-6 weeks**
- A full well balanced diet & adequate fluids intake are recommended.
- Monitor for signs of fulminant hepatic failure (confusion, disordered LFTs)
- In HCV & HBV warn the patient of possible spread to sexual contact.

"Tip"

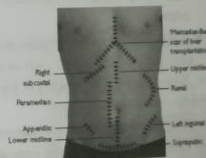
- **General malaise for 2-3 months is common**
- Alcohol should be avoided
- Oral contraceptives can be resumed after clinical and biochemical recovery
- Viral hepatitis is a **notifiable disease**
- **Isolation is not necessary** but good personal hygiene is advisable to prevent spread of infection
- Children can return to school as soon as clinical recovery allows.

Abdominal Examination

A. Inspection: inspect for

• Scars:

- They result from trauma or previous surgery
- Recent scars look pink and vascular
- Old scars look white & may be indurated



• Abdominal swelling

Think of 5 Fs

1. Fat
2. Flatus
3. Fluid (Ascites)
4. Faeces
5. Fetus (pregnancy)

• Focal swelling (mass)

- **Obvious pulsations:** A pulsatile expanding mass in the epigastrium may be an abdominal Aortic aneurysm (AAA)

• Striae:

- they are "stretch marks" which are pink or white lines caused by changes in the tension of the abdominal wall
- Think of **obesity, pregnancy, rapid wt loss or abdominal paracentesis**.

B. Palpation:

- The patient should be positioned **lying supine** with the head supported by 1 pillow and arms at their sides.
- Make sure that the patient's and your hands are warm
- **Bending the knees** of the patient slightly may be helpful
- Each of the 4 quadrants should be examined (light and deep palpation)
- Before you begin, ask the patient if there **any area of tenderness** and examine it last.
- While palpating be **looking at his face** to assess any pain.

➤ Light palpation

- Use your **finger tips & palmar aspects** of the fingers.
- Lay your right hand on the patient's abdomen and **gently press in by flexing at the metacarpo-phalangeal joints**.
- Note **tenderness, guarding (involuntary tensing of abdominal ms because of pain or fear of it)**
- Note **rebound tenderness: greater pain on removing hand than on gently depressing abdomen**; it is a sign of **peritoneal inflammation, appendicitis & cholecystitis**.

➤ Deep palpation

- Re-examine using **more pressure**
- If you felt a **mass** describe it

- | | |
|------------------|-----------------------------|
| ○ Exact location | ○ Mobility |
| ○ Size | ○ Movement with respiration |
| ○ Shape | ○ Tenderness |
| ○ Consistency | ○ Pulsatile or not? |

➤ Remember: signs of peritonitis are:

- Pain on light palpation
- rebound tenderness
- Involuntary guarding
- Pain recurring with slight movement of the examining hand
- Absent bowel sounds

■ Palpation of the liver:

- Normally the liver extends **from the 5th intercostal space on the right of the midline to the costal margin**.
- Normally liver is not palpable so **don't worry if you can't feel it**.
- **Start at the right iliac fossa** with the patient breathing deeply.
- Use the **radial border of the index finger** to feel the liver edge
- Move up **2cm at a time at each breath**
- Repeat moving until the liver is felt



- If the liver edge is felt, you should note:
 - How far below the costal margin?
 - Edge: smooth or irregular?
 - Is there tenderness or not?
 - Is the liver pulsatile or not? think of TR (tricuspid regurge)
 - Size: is there hepatomegaly?
 - Define the upper border by percussion.

Remember some causes of hepatomegaly:

- Chronic liver dse (NB: cirrhosis causes a small shrunken liver)
- Right sided heart failure
- Biliary obstruction
- Infection (acute viral hepatitis, brucellosis, T.B.)
- Cancer
- Alcohol

Remember some signs of hepatic failure:

- Foetor hepaticus
- Flapping tremors of outstretched arms with hands dorsiflexed.
- Disturbed conscious level.

Gall bladder

- Lies at the right costal margin at the tip of the 9th rib at the lateral border of the rectus abdominis.
- Only palpable when enlarged d.t Biliary Obstruction or acute cholecystitis.
- Felt as bulbous, focal, rounded mass which moves with respiration



- Position your right hand **perpendicular to the costal margin** and in a **medial → lateral direction**.

Remember

1. Murphy's sign

- A sign of **cholecystitis**: pain on palpation over the gall bladder during deep inspiration
- **Only positive** if there is **NO** pain on the left at the same position

2. Courvoisier's Law

- = In the presence of jaundice a palpable gall bladder is probably **NOT** caused by gall stones.

Palpation of the spleen:

- Normally hidden beneath the left costal cartilage and impalpable
- Start in the **right iliac fossa (RIF)** moving towards the left upper quadrant with each breath.
- If you suspect splenomegaly but can't detect it, assess the patient in the right lateral position خليه ينام على جنبه اليمين with your left hand pulling forward from behind the ribcage.
- **Spleen is enlarged in** Malaria, Kala-azar, **PHTN** secondary to cirrhosis, subacute endocarditis, RA, glandular fever & others.



C. Percussion:

- To determine the size and nature of enlarged organs or masses
- To detect shifting dullness
- Eliciting rebound tenderness (peritonitis or appendicitis)
- Organs or masses will appear as dullness
- Bowel full of gas will seem abnormally resonant.

Examination for ascites

- Ascites will give distended abdomen with **everted umbilicus**.
- If you suspect the presence of Ascites:
 - Percuss **centrally** → **laterally** with fingers spread and positioned longitudinally
 - Listen (and feel) for a definite change to a dull note.

Shifting dullness:

1. Percuss **centrally** → **laterally** until dullness is detected. This marks the air-fluid level in the abdomen
2. **Keep your fingers press** there as you ask the patient to roll the patient to the opposite side (i.e. if dullness is detected on the right, roll the patient to their left hand side)
3. Ask the patient to hold the new position for ~ half a minute
4. Repeat percussion moving laterally to central over your mark.



(A and B) Percuss towards the flank from resonant to dull.



(C) Then ask the patient to roll on to his other side. In ascites, the note then becomes resonant.

Reference of the above figures: Macleod's P 204

4. If the dullness truly was an air fluid level, the fluid will now be moved by gravity away from the marked spot and the previously dull area will be resonant.

D. Auscultation:

1. With the patient lying on his back, place the stethoscope diaphragm to the **right of the umbilicus** and **do not move it**. Bowel sounds are **gurgling noises** from the normal peristaltic activity of the gut. They **normally occur every 5-10 seconds**, but the frequency varies.
2. Listen for **up to 2 minutes** before concluding that bowel sounds are absent. **Absence of bowel sounds implies paralytic ileus or peritonitis**. In intestinal obstruction, bowel sounds occur with increased frequency, volume and pitch, and have a high-pitched, tinkling quality.
3. Listen above the umbilicus over the aorta for arterial bruits, which suggest an atheromatous or aneurysmal aorta or superior mesenteric artery stenosis.
4. Now place the stethoscope 2-3 cm above and lateral to the umbilicus and listen for renal artery bruits from renal artery stenosis.
5. Listen over the liver for bruits due to hepatoma or acute alcoholic hepatitis. A friction rub, which sounds like rubbing your dry fingers together, may be heard over the liver (perihepatitis) or spleen (perisplenitis).
6. A **succussion splash** sounds like a half-filled water bottle being shaken. Explain the procedure to the patient then **shake the abdomen by lifting him with both hands under the pelvis**. An audible splash more than 4 hours after the patient has eaten or drunk anything indicates delayed gastric emptying, e.g. pyloric stenosis.

References

1. OHCM: p 41
2. Oxford handbook of clinical examination and practical skills: p 248-264
3. Macleod's clinical examination 12th edition

GIT drugs

Histamine H2 receptors antagonists

Members:

- Cimetidine
- Famotidine
- Nizatidine
- Ranitidine
- Ranitidine bismuth citrate

Uses:

- Healing of peptic ulcer
- Reflux oesophagitis
- Short term relief of dyspepsia

Take care:

- May mask symptoms of gastric malignancy
- Have the dose in severe renal and hepatic insufficiency
- Avoid them in pregnancy

How to use:

- Best taken in divided doses to cover the whole 24 hrs
- For DU: 4-6 weeks
- For GU 6 weeks
- For NSAIDs associated ulcer : 8 weeks

Prescribing Information:

1. Famotidine:

- Ulcer : 40 mg/day PO at night
Maintenance dose: 10-20 mg/day PO
- Reflux oesophagitis: 20-40 mg/day
R/Famotak 40 قرص واحد قبل النوم
R/Famotak 20 قرص واحد قبل النوم

2. Nizatidine:

- Ulcer: 150 mg/day PO 1x2 or 300 mg at night
Maintenance dose: 150 mg at night
- Reflux oesophagitis : 150-300 mg at night
R/Nizatine 300 كبسولة واحدة قبل النوم
R/Nizatine 150 1x2

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3. Ranitidine:

- Ulcer : 150 mg/day PO 1x2 or 300 mg at night
Maintenance dose: 150 mg at night
- Reflux oesophagitis: 150-300 mg at night
R/Rantidol 150,300 الأرخض
R/Zantak 150,300
R/Rani eff. ١٥٠ مجم

Proton pump inhibitors (PPI)

Members:

- Omeprazole
- Esomeprazole (the most powerful)
- Rabeprazole
- Pantoprazole
- Lansoprazole

Uses:

- Healing of peptic ulcer
- Reflux oesophagitis
- With Abs: Eradication of Helicobacter Pylori
- Treatment of Zollinger-Ellison syndrome

Take care:

- PPI can mask symptoms of gastric malignancy
- Don't use in severe hepatic insufficiency
- Patient should take tablets with water as tablets may stick to esophageal mucosa and cause ulceration.

How to use:

1. Treatment of PU:

- DU : for 4-6 weeks
- GU : for 6 weeks
- NSAIDs associated ulcer : for 8 weeks
- If H.pylori is the cause : maintenance dose is not required after eradication of H.pylori

2. Reflux oesophagitis:

- Needs 8 weeks tit & always relapse, so give maintenance at half of the dose.

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o Omeprazole & Lansoprazole capsules can be opened and granules are given with fruit juice but WARN the patient not to chew the granules.

Prescribing information:

1. Omeprazole:

- Ulcer: 20 mg/day PO
R/Omeprazole 20 كبسولة واحدة يوميا لمدة شهر إلى شهر ونصف
Maintenance dose: 10-20 mg/day PO
R/Omeprazole 20 كبسولة واحدة يوميا
- Reflux oesophagitis: 20-40 mg/day
R/Gastroloc 40 كبسولة واحدة يوميا لمدة شهرين

2. Esomeprazole:

- Reflux oesophagitis: 40 mg/day
R/Nexium 40 L.E كبسولة واحدة يوميا لمدة شهرين

3. Lansoprazole:

- Ulcer: 30 mg/day PO
R/Peptazole كبسولة واحدة يوميا لمدة شهر إلى شهر ونصف
Maintenance dose: 15-30mg/day PO
R/Lansoprazole (15 mg) كبسولة واحدة يوميا لمدة شهر إلى شهر ونصف
- Reflux oesophagitis: 30 mg/day
R/Peptazole كبسولة واحدة يوميا لمدة شهر إلى شهر ونصف

4. Pantoprazole:

- Ulcer: 40 mg/day PO
R/Pantoloc 40 (35 LE) كبسولة واحدة يوميا
R/Controloc 40 أغلى
Maintenance dose: 20-40 mg/day PO
R/Pantoloc 20
- Reflux oesophagitis: 20-40 mg/day
R/Pantoloc 20

5. Rabeprazole:

- Ulcer: 20 mg/day PO
R/Rabacid 20
Maintenance dose: 10-20 mg/day PO
R/Rabacid 10
- Reflux oesophagitis: 10-20 mg/day

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Put in your mind

- 5 Fs of abdominal swelling (Fat, Flatus, Fetus, Fluid, Faeces)
- Signs of peritonitis are (pain on light palpation / rebound tenderness / involuntary guarding / pain recurring with slight movement of the examining hand / absent bowel sounds)
- Normally the liver extends from the 5th intercostal space on the right of the midline to the costal margin.
- Normally the liver is not palpable so, don't worry if you can't feel it
- Remember some causes of hepatomegaly
 - Chronic liver disease (cirrhosis causes a small shrunken liver)
 - Right sided heart failure
 - Biliary obstruction
 - Acute viral hepatitis
 - Alcohol -
 - Cancer
- Gall bladder lies at the right costal margin at the tip of 9th rib at the lateral border of the rectus abdominis.
- Gall bladder is only palpable when enlarged
- Gall bladder is felt as bulbous, focal, rounded mass which moves with respiration.
- Murphy's sign is a sign of cholecystitis: pain on palpation over the gall bladder during deep inspiration. (Only positive if there is no pain on the left at the same position)
- Spleen is normally hidden beneath the left costal cartilage and impalpable.
- Absent bowel sounds may be ileus
- Vomiting delayed for >1hr after meal suggest Gastro-oesophageal obstruction or gastroparesis
- Early morning vomiting is typical of pregnancy or Tard ICT
- Vomiting undigested food without bile suggest pyloric obstruction.
- Haematemesis:
 - Large volume of fresh, red blood suggests active bleeding (varices, PU, GORD)
 - Small streaks (minor oesophageal trauma)
- Odynophagia (pain on swallowing) is suggestive of infective oesophagitis: candida, herpes, CMV, PU, oesophageal perforation

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17. GORD (heartburn, acid reflux)
- Midline, retrosternal pain
 - Burning
 - Radiates to the throats and occasionally infra-scapular region.
18. Normal bowel habit ranges from 3 times/day to once every 3 days.
19. Constipation = passage of stool < 3 times/week
Or stools that are hard or difficult to pass
20. Ca antacids cause constipation
21. Hypothyroidism or hypercalcemia cause constipation
22. Diarrhea is increase in stool volume (> 200 ml) and frequency (3/day)
Or Diarrhea = change in consistency to semi-formed or liquid stool
23. Presence of mucus in stool may indicate:
- IBD
 - Small or large bowel
 - Solitary rectal ulcer
24. Steatorrhea is a common feature of pancreatic insufficiency.
25. Steatorrhea also caused by IBS, celiac disease, blind bowel loops
26. MI may present with epigastric pain
27. Pain radiating to right scapula.
28. Abdominal pain radiating to mid-back: think of pancreatitis
29. Abdominal pain radiating to shoulder tip: think of diaphragmatic irritation
30. If acute diarrhea think of food poisoning, viral GE, IBS, ischemic colitis

31. الأظمة التي تحتوي على الياف:

- الفواكه مثل التفاح - الكزبرة - الخوخ - البوستي
- الخضروات مثل الترنيط - الحنظل - البطاطس - السبانخ - الفاصوليا

32. IBS is characterized by abdominal pain & altered bowel habit (constipation & diarrhea occurring alone or in combination)

33. الأظمة التي تسبب الازدحام مثل: القولون - الطمعية - الغرس - البثورات - المسبكات

34. The common cause of pruritis ani in children is thread worms.

35. Acute diverticulitis is characterized by lower abdominal pain (usually left iliac) - altered bowel habit - fever / also think of N&V, dysuria & urgency, rectal bleeding.

36. IBS mask signs of shock

37. In patient with acute abdomen: absence of fever does not exclude infection especially in the very old, very ill or immunosuppressed

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38. Splenic rupture may occur in patients with glandular fever.
39. Hiccups: think of uremia & reflux oesophagitis
40. HAV spread by feco-oral route, HBV by blood and sexual, HCV by blood and not easily by sexual contact
41. Treatment of HAV is only supportive.

Test yourself

1. Steatorrhea is a common feature of.....
2. Vomiting with abdominal pain and fever may be due to.....
3. Nature of GORD pain is.....
4. Dyspepsia means.....
5. Dysphagia means.....
6. Site of GORD pain is.....
7. Acid reflux is worsened by certain foods such as.....
8. Def. of constipation is.....
9. Dyspnea, Orthopnea, PND, liver enlargement, tenderness, leg oedema are features of.....
10. Mention 4 causes of constipation.....
11. الأظمة التي تحتوي على الياف.....
12. drugs causing haematemesis may be.....
13. Def. of tenesmus is.....
14. Vomiting with wt loss may be due to.....
15. Imodium is a treatment of.....
16. Treatment of simple vomiting is.....
17. Xerophthalmia is due to.....
18. Common causes of diarrhea (5) are.....
19. Steatorrhea is.....
20. Signs of peritonitis are.....
21. Vomiting shortly after feed may be due to.....
22. Murphy's sign is a sign of.....

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23. Alarming signs in a case of dyspepsia are.....
24. Early morning vomiting is typical of.....
25. Courvoisier's law says.....
26. If dysphagia for solids > liquids think of.....
27. 3 member of H₂ blockers.....
28. BeriBeri is due to.....
29. HBV is acquired by.....
30. While HAV by.....
31. HCV by.....
32. Buscopan is a treatment of.....
33. Zantac treats.....
34. Treatment of simple intestinal spasm.....
35. Scurvy is due to.....
36. Pellagra is due to.....
37. To eradicate H. pylori we give.....
38. Disflatyl is a treatment of.....
39. الأظمة للأظمة التي تسبب الازدحام:

40. The active ingredient of

Zantac	Sennalax	Rabacid
Buscopan	Duphalac	Antiver
Peptazole	Nexium	Flagyl
Omez	Famotak	

Answers

1. Chronic pancreatitis
2. GE, food poisoning, UTI, acute appendicitis, pneumonia, hepatitis
3. Burning
4. Multiple symptoms symptoms: epigastric pain, heartburn, early satiety, bloating, N & V
5. Difficulty in swallowing
6. Midline, retrosternal
7. Alcohol, Chocolate, caffeine, salty meals
8. Passage of stool < 3 times/w or stools that are hard or difficult to pass
9. CCF
10. Low fiber diet, Anorectal disease, hypothyroidism, antacids
11. الفواكه مثل التفاح - الكزبرة - الخوخ - البوستي
12. NSAIDs, aspirin, warfarin
13. Intense desire to defecate but no stool
14. Cancer
15. Diarrhea, IBS
16. Primperan
17. vitamin A deficiency
18. GE, IBS, cancer, UC, Crohn's dse, celiac die
19. Fat malabsorption
20. Pain on light palpation, rebound tenderness, involuntary guarding, pain recurring on slight movement of examiner's hand, absent bowel sounds
21. Gastritis/PU, acute cholecystitis, acute pancreatitis, gastric outlet obstruction.
22. Cholecystitis
23. chronic GI bleeding, progressive wt loss, progressive dyspepsia, persistent vomiting, iron deficiency anaemia, epigastric mass
24. pregnancy or increased ICT
25. In the presence of jaundice, palpable gall bladder is probably not caused by gall stones
26. Physical obstruction such as cancer
27. Ranitidine, famotidine, cimetidine
28. Vitamin B1 deficiency
29. Blood transfusion, sexual
30. Feco-oral
31. Blood transfusion
32. Colic
33. Gastritis, GORD
34. Buscopan or duspatalin (mebeverine)
35. Vitamin C deficiency
36. Nicotinic acid deficiency
37. full dose PPI (lansoprazole) 30mg 1x2 + amoxicillin 1gm 1x2 + clarithromycin 500mg 1x2 for 7 days
38. Flatulence
39. القولون - الطمعية - الغرس - البثورات - المسبكات
40. Ranitidine

تم فصل الـ GIT والله تعالى الفضل والمنة

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